

MONTANA AERONAUTICS COMMISSION



Volume 14, No. 9

November, 1963

FF & R ASSOCIATION RE-ELECTS OFFICERS AT BOZEMAN CONVENTION

At their convention in Bozeman, October 4 and 5, the Montana Flying Farmers and Ranchers Association re-elected Ermal Hansen, Fort Ben-
n, President; Earl Keister, Conrad, Vice President; and Roselia Tempero, Worden, Secretary-treasurer. The following directors were re-elected: Leonard Sorenson, Bozeman, Arnold Sorenson, Kremlin and Morton Mortenson, Circle. Mrs. Henry (Verna) Woods of Gilford was elected Queen for 1964 and will begin her reign in the Spring.



Secretary Rosella and
President Ermal

Leonard Sorenson was in charge of all local arrangements, Mrs. Wallace Hecox ably handled registration and Mrs. Leonard Sorenson was busy serving refreshments to the incoming members and their families. Queen Scotty Jones was on hand

to greet the International FF&R Queen when she arrived from Oskaloosa, Iowa with her husband, having flown 975 miles on Friday to attend the Bozeman meet. An international flavor entered the meet when Region Seven Director Paul Madge and his wife from Milk River, Alberta and six members of the Alberta association and Mrs. Kelly Oscar, Saskatchewan Queen, and her husband heading a delegation of 27 from Saskatchewan arrived enroute home from a tour. Mrs. Mildred Beamish, Marshall, Saskatchewan, flew down alone and joined the group in Bozeman.

At the Friday evening banquet, held at the Beaumont Club in Belgrade, Mr. Nelson Story, III, gave an entertaining presentation on "seat of your pants" flying of the early pilots and the changes in aviation since that period.

Entertainment at the Saturday luncheon was provided by James Stradley of Gallatin Flying Service showing an excellent selection of wildlife films. Reports were given by Charles A. Lynch, Director of the Montana Aeronautics Commission, on the six airstrips completed during the past year including Augusta, Boulder, Polebridge, Whitefish, Anaconda and Ashland. Mr. Lynch gave a brief summary of the successful AOPA 360° Course recently held in Billings. Mr. Frank Wiley, Advisor of Montana Aeronautics Commission, reported on his progress on the "History of Aviation" and revealed that

numerous Montana men were interested in aviation shortly after the initial flight was made.

A tour of the college was conducted in the afternoon with the men favoring the tour of the Veterinary Research Lab and the women particularly enjoying the tour of the college museum.



International Queen Connie and
Rosella Tempero

Following is a short summary of the resolutions passed:

Resolved: that the MFF & R Association extend its appreciation to various organizations and merchants for facilities provided and services rendered during their Convention and to the MAC for their services.

Resolved: the Association encourage its officers and members to recommend passage of HR 6697 regarding FCC license fees.

Resolved: the Association give their full support to the action of the International FF Board of Direc-

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Official Monthly Publication
of the
**MONTANA AERONAUTICS
COMMISSION**

Box 1698
Helena, Montana

Tim Babcock, Governor

Charles A. Lynch, Director

Herb Jungemann, Chairman
Gordon Hickman, Vice Chairman
Walter Hope, Secretary
E. B. Cogswell, Member
Clarence R. Anthony, Member
Carl W. (Bill) Bell, Member
Jack R. Hughes, Member



DIRECTOR'S COLUMN



AVIATION MECHANICS REFRESHER SEMINAR

The Montana Aeronautics Commission is pleased to announce an Aviation Mechanic's Refresher Seminar will be conducted by the Commission in co-operation with various aircraft engine and accessory manufacturers, and the Helena High School Department of Aeronautics and Related Trades. This is another step in the Aeronautics Commission's continual drive for increased safety through education. The course will begin December 2 at the Helena High School Department of Aeronautics located on Helena Airport, with classroom and laboratory sessions being conducted by airframe engine and accessory manufacturers. The course will run eight days, concluding on Monday, December 9th. Airframe manufacturers participating are Piper Aircraft Corporation, Lockhaven, Pennsylvania; Cessna Aircraft Company, Wichita, Kansas, and Beech Aircraft Company of Wichita, Kansas.

Engine manufacturers represented will be Continental Motors Corporation, Muskegon, Michigan and Lycoming Aviation Division, Williamsport, Pennsylvania. Other manufacturers represented through their Airframe Service Departments will be

Scintilla Magneto Corporation, Goodrich Rubber Company, Champion Spark Plugs, Woodward Governors, Martsell and McCauley Propellers.

One evening session will be devoted to electronics and their application to the aviation mechanic. Trainees enrolled will be licensed aviation mechanics who may not have had the opportunity to recently attend specialized service schools conducted by the manufacturers for dealers and distributors of the various products. The purpose of the course is to update a majority of Montana's aviation mechanics residing in the outlying districts who have not had service clinic training and the exchange of mutual aircraft maintenance procedures and general information.

As far as is known at this time, this is the first such Mechanic Refresher Seminar to be staged in the United States and will be similar in scope to the very successful Flight Instructor Refresher Course which the Montana Aeronautics Commission has conducted the past two years in Great Falls, Montana, for the purpose of refreshing and updating the full-time Professional Flight Instructor.

The services of the various service departments of the manufacturers has been willingly offered on a gratis basis to the industry here in Montana for this program. Montana currently has about 100 full time certified aircraft and aircraft engine mechanics in the industry and it is anticipated that from 25 to 50% of this total will be able to attend this important course.

AVIATION EDUCATION NOTEBOOK

By Mary Jo Janey

One frequently hears remarks from aviation people that high schools should be offering aviation courses; that the young people are not taking to flying as they once did; and that schools are shrugging off their responsibilities in keeping pace with the advancement of technology. Following is an example of how one local community seized the initiative when an opportunity was offered. This story is not intended to be construed as the only answer—indeed,

there are as many answers as there are communities.

Houston, Missouri, is a small community of some 1500 souls, with no particular national claim to fame, but a project in Aviation Education is underway in the high school there which has excited interest in many other areas of the nation.

The course is offered on a selective basis and includes, besides two or three hours of flight instruction, the basic principles of flight, the role of aviation in the community and nation, and a study of career opportunities in the aerospace industry. It is patterned after the AAA Driver Training program, with students receiving 90 hours of classroom instruction. In the words of Superintendent Billy Kelsay, "The primary purpose of our course is not to make pilots out of the enrollees, but to give them basic instruction in the fundamentals of flight whereas, if they so desire, with a little more private instruction, they can become pilots. It is also our purpose that some may become interested enough in other aviation related areas that they might choose one of these areas for a vocation."

Dr. T. J. Burns, a local physician-pilot, donated a Cessna 150 to the school and paid for flight instruction for Coach Glenn Weaver, who is the course instructor. In addition, Dr. Burns helped build the school hangar. All other costs of the program are being underwritten by the school board; however, each of 24 students enrolled pays \$25.00 which the school board believes will make the total cost to the district nominal.

According to Superintendent Kelsay, the course has been well received by the general public and certainly by the students, as evidenced by the fact that many more enrolled for the course than could be accommodated. Kelsay says that students were selected on the basis of intellect, academic success, and school citizenship. Quality is stressed, rather than quantity.

Dr. Mervin Strickler of Federal Aviation Agency and Congressman Richard Ichard of Missouri's 8th District gave advice and assistance in setting up the program.

Next month we hope to relate what is happening in several Montana communities in Aviation Education at the high school level.

tors in regard to appointing a committee for research of costs of customs at various points of entry into the U. S. and expend funds for such a survey.

Resolved: the Association recommend to the State Board of Equalization and the Association of County Commissioners, the use of a rate-book value in line with the property classifications suggested by the Montana Aviation Trades.

Resolved: the Association request the city of Bozeman to investigate the possibility of establishing a minimum utility airport in the immediate vicinity of the city of Bozeman and the Montana State College.

Notice from the President, Ermal Hansen:

These days when persons and places are rapidly becoming codes and numbers, the Montana Flying Farmers and Ranchers have something special. Their membership card has your name written on it. You get this and much more by joining your state and international Association. Ask Rosella Tempero, Secretary-treasurer, Worden, Montana, or any member. Dues are \$10.00 per year and are due in October. For safe and economical flying, always go IFR - VFR - MFR.

FEDERAL AVIATION AGENCY SCHEDULED ITINERARY LISTING

Airport	Nov.	Dec.
Bozeman (Gallatin Field)	7	12
Great Falls (International)	14	5
Missoula (Missoula County)	21	19

Provisions have been made to give private pilot written examinations on an appointment basis only at the following FAA Flight Service Stations:

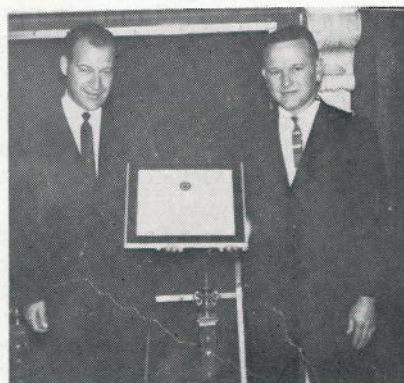
Cut Bank	Livingston
Bozeman	Missoula
Butte	

VORS FOR SALE

"The State of Minnesota has three VORs for sale. These are suitable for obtaining a public instrument approach. For information on bidding, contact: Robert R. Engelhardt, Minnesota Department of Aeronautics, St. Paul, Minnesota, 55107, Phone 612-222-4741."

Governor Babcock Presents Robert Huston FAA Mechanics Safety Award

At a presentation ceremony held in the Governor's Reception Room in the state capitol building, Thursday, October 17th, Governor Tim Babcock presented to Robert Huston of Great Falls the FAA's Mechanics Safety Award as winner for the state of Montana. Mr. Lee Mills, Supervising Inspector for the FAA's General Aviation District Office in Helena, spoke briefly on the Mechanics' Safety Award Program. He stated the program was initiated this year by the FAA's Administrator Najeeb Halaby to select mechanics who had made outstanding contribution to aviation safety during 1962 and that the program will continue on an annual basis. A winner is selected from each state; state winners will be screened with regional winners being chosen in November and finally a Grand National winner selected in December. It is the hope that this program will bring greater recognition to aviation mechanics and emphasize their vital role in air safety and foster the aviation mechanic's continuing pride and skill in his work and to increase their incentive to improve safety factors in the aviation industry.



Governor Babcock and Bob Huston with award plaque.

Montana Aeronautics Commission Director, Charles A. Lynch, in his remarks commented that Bob Huston was far from being a stranger to the Montana Aviation Industry, as he became active in the Great Falls area in 1956, working for Homer Holman of Skyways, Inc. as pilot and aircraft mechanic. In 1960 Bob started the Skyways Aircraft Repair Shop in conjunction with Skyways, Inc. He

received his A & E Certificate from the Missouri Aviation Institute in Kansas City in 1941 and was appointed an Aviation Inspector for the FAA in 1957.

Governor Babcock made the presentation of the Award Plaque, stating that it was with a great deal of pleasure he presented this award as he is very well acquainted with the necessary role the aviation mechanic plays in the aviation field and his vital importance to the safety of all who fly.

The engraving on the plaque Bob received read as follows: Federal Aviation Agency—Aviation Mechanic Safety Award—Robert Edward Huston — Presented for demonstrating skill and imagination in developing the outstanding contribution to safety in general aviation through maintenance practices in the State of Montana during the year 1962.

Fog and Stratus Over Western Montana

By Warren B. Price
Aviation Forecaster
WBAS, Great Falls

It is November and the weather is clear over Montana, with high pressure and no frontal systems. You are a pilot who had planned a flight to Missoula in the morning, but the forecast reads, "fog in western valleys occasionally restricting visibility to one mile until 1000M." Do you plan it, or not? Obviously the decision would be somewhat easier if the forecast were more explicit. A later forecast may be more definite as to time and place, but in any case there is general information about fog and stratus in western Montana which will help in your flight planning.

Remember Montana has less fog than most states—although this may be small comfort if you are fogged in (or out). Montana's fog is quite seasonal and is confined almost entirely to the period September through March. Missoula has more fog than any other regular weather reporting point in the state; therefore, the only extensive study of fog in Montana has been concerned primarily with that area, including the Clark Fork drainage system. Fog which forms in the Flathead Valley is closely related, as is Spokane Valley fog. However, fog which forms

at Butte, Helena, Great Falls and other parts of Montana is somewhat different. Some of these differences are fine distinctions primarily useful to forecasters.

There are many kinds of fog over the world, such as upslope, radiation, high inversion, advection, pre-frontal, and so on. Some of these are confusing to both pilot and forecasters. However, for flight purposes and forecasting, it is useful to divide Missoula area fog into only two general types, radiation and non-radiation.

A hot stove loses its heat by radiation after the fire has gone out. Similar to the earth at night, and the cooling which takes place in the lower layers of air is often sufficient to condense the water vapor out of the air into a visible form known as fog. This we call radiation fog, because it is formed primarily by nighttime radiational cooling, although other forces sometimes aid the process.

Most of the fog which occurs over western Montana during autumn months September, October, and about half-way through November, is radiation type. It usually forms in the lower elevations of river valleys between 0400M and 0800M on clear nights. There is no established pattern as to just where the first fog will form, but favored locations are in the vicinity of Drummond, lower parts of the Bitterroot, and in the Missoula Valley. After first forming in scattered areas, fog gradually becomes more extensive and deeper until daytime heating begins to take effect. Thereafter the fog begins to thin out or "burn off" so that five or six miles visibility is usually restored sometime between 1000M and 1300M.

From the pilot's standpoint, it should be emphasized that true radiation fog is seldom a flight hazard which might possibly cost life or limb; rather it is an inconvenience which delays take-off or landing at a particular airport. Visual flight is usually possible above this type of fog, even in mountainous terrain, due to its relatively shallow nature. For this reason, it is useful that the pilot be able to distinguish between radiation fog and the potentially more dangerous non-radiation type. The obvious answer to the pilot who wanted to fly to Missoula is, to go

ahead and plan the flight, assuming that he will be encountering little risk, but knowing that the flight may have to be delayed 2 or 3 hours.

Now let us take the case of another pilot, with the same destination about two months later. This time there is already widespread cloudiness over Montana west of the Continental Divide, with or without a frontal system, but there is intermittent precipitation. Most of the ceilings apparently have been high enough, for example, in the five to seven thousand foot range, but there are scattered lower clouds below three thousand feet, and the visibility is occasionally less than five miles in light rain, snow, or fog. This is a case of non-radiation fog, so-called because it is formed primarily by precipitation which finally saturates the lower layers of air through which it falls.

There are many cases of this kind wherein both ceilings and visibilities remain sufficiently high to allow safe flight to the final destination. However, to plan a flight under these conditions involves some hazard due to there being good chances that conditions may lower over a broad area about the time the flight nears its destination, preventing further visual flight in any direction. The mountains may suddenly be obscured, with the clouds extending up to possibly 12,000 feet, and a pilot with no instrument training may find himself in a serious position. Non-radiation fog is therefore potentially more hazardous than radiation fog, even though reported visibilities may be much higher.

Radiation fog may occur during any of the months from September through March, but non-radiation fog seldom occurs before late November. Both types usually occur in the absence of stratus, or else with only two or three hours of intermittent scattered to broken clouds below 1,000 feet. However, a few cases of persistent stratus, with or without fog, usually occur in the November-December period, and last from one to several days. These cases of persistent stratus are accompanied by so-called "inversions" aloft, where the temperature at some level such as 7,000 feet (MSL) may be five to fifteen degrees higher than on the valley bottom. The top of the stratus is usually well below 6,000 feet

(MSL) with or without higher clouds above.

Although this type of persistent stratus is certainly not considered to be a favorable condition for visual flights over western Montana, it is not potentially as hazardous as non-radiation fog. This is due partly to less frequent occurrence and partly to continuous reporting of ceilings near 1,000 feet for a period of 12 to 60 hours, over a large area of western Montana, eastern Washington and northern Idaho, which should tend to discourage flights into that area.

From the standpoint of forecasting, the pilot should keep in mind that radiation fog can be forecast in the Missoula area with much greater accuracy than either non-radiation fog or stratus. This should be one reason for planning to fly (with appropriate flight time adjustment) even with radiation fog in October, but probably staying home because of non-radiation fog in December.

Montana Pilots Instruct At AOPA's Annual Convention

Tom Herrod, Herrod Aviation Company and Frank Hoffman, Hoffman's Custom Flight Service, both of Billings, served as instructors at the Annual Convention of the Aircraft Owners and Pilots Association in Palm Springs, California, October 4-11.

Courses offered during the Convention were Light Twin Refresher Course; AOPA Instrument Pilot Refresher Course; Instrument Enroute Procedures; 360° Rating Course, Nav-Com, and the AOPA Pinch-Hitter Course. The latter was an outstanding "Hit" drawing 150 women trainees. This course consists of four hours of flight and four hours of ground school instruction and is designed to equip wives, sweethearts, best pals or business associates with sufficient "know-how" to handle and land a light plane in cases of emergency.

Ralph Nelson, Project Director for the AOPA expressed the hope that this course will be offered in various cities in every state across the nation as one more safety feature in this age of Family Aviation.

ANGER—is only one letter short of danger.

KNOW YOUR COMMISSION



VERNON MOODY

Vern attended grade school in his native town of Great Falls and high school in Simms, Montana. While serving with the U. S. Marine Corps in the First Engineer's Battalion from 1951 until 1954, Vern was attached to the First Marine Division during combat duty in Korea.

Vern returned to Montana and attended Montana State College at Bozeman, receiving his Bachelor of Science degree in 1958. He was employed by the Montana Highway Department for a period of 4½ years as a Highway Design Draftsman. In 1962 Vern joined the staff of the Montana Aeronautics Commission in the Airports Division as Draftsman on Airport Design. Vern was previously exposed to Aviation as a passenger but immediately began working towards his private pilot's license which he now holds.

Despite a full schedule and considerable traveling in performing airport survey and planning, Vern is now underway in his study towards obtaining his commercial license. Flying has become not only "part of his job," in his chosen field, but is listed as Vern's favorite hobby.

Vern, his wife Roberta and their three children, Cathy 9, Danny 6 and Lori 4, reside at 2209 Fifth Avenue in Helena.

ED GRANGER

Ed Granger was raised on a ranch in the Milk River Valley and attended grade and high school at Harlem. Ed served in the U. S. Air Force for a period of four years from 1951-1955, and after his discharge he attended Northern Montana College of Havre, Montana for two years. Ed then transferred to Montana State College at Bozeman and received his degree in Civil Engineering in 1959. After graduation Ed was employed by the Montana State Planning Board. Ed left the Planning Board to continue his flying career by attending Officer Candidate and Armor School, and received his wings in 1961. At the present time Ed holds a commercial license with Instrument and Flight Instructor, (airplane/instrument) ratings.

In 1960, Ed's love of aviation drew him from his bridge design and Hydraulics Engineering duties with the Highway Department into employment with the Montana Aeronautics Commission. After diligent study and taking of state exams, Eddie has obtained his license as a Registered Professional Engineer for the states of Montana and Wyoming.

In addition to the hours spent in the air in conjunction with his duties as Engineer for the Airport Division of Montana Aeronautics Commission,

Ed spends his weekends flying with the Aviation Company of the Montana Army Guard.

Ed, his wife, Josie and their two sons, Bill, 11 and Tim, 5 reside in Unionville.

PILOTS!

You will have no hunger problems if you are in the Lewistown area come meal time. Now you may dine from 7:00 A.M. to 7:00 P.M. at the airport cafe! Breakfast, lunch and short orders will be served.

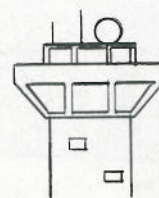
Charles Cascaden, head basketball coach at Fergus County High School and his wife Betty have leased the cafe from the City-County Airport Commission. Mrs. Cascaden will manage the cafe with Mrs. Beulah Knerr in charge of "cooking."

Rent-a-cars are available.

A SMILE

A smile costs nothing, but gets much. It enriches those who receive, without making poorer those who give. It takes but a moment, but the memory of it sometimes lasts forever. None is so rich or mighty that he can get along without it, and none is so poor that he cannot be made rich by it. A smile creates happiness in the home, fosters good will in business, and is the counter-sign of friendship. It brings rest to the weary, cheer to the discouraged, sunshine to the sad, and is nature's best antidote for trouble. Yet it cannot be bought, begged, borrowed, or stolen, for it is something of no value to anyone until it is given away. Some people are too tired to give you a smile. Give them one of yours, as none needs a smile so much as he who has none to give.

—Author Unknown



TOWER

OPERATIONS

MONTANA TOWER-CONTROLLED AIRPORT OPERATIONS

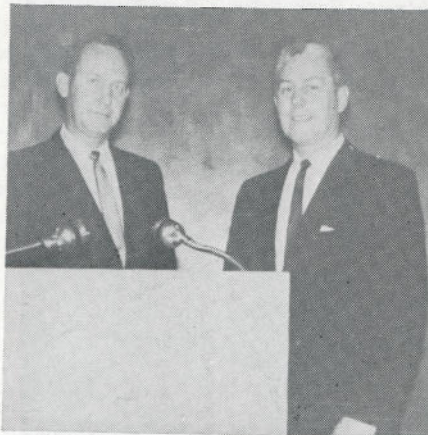
SEPTEMBER, 1963

	Total Operations	Instrument Operations
Billings	8,748	653
Great Falls	5,635	860
Missoula	4,812	184
Helena	3,077	55

LOREN FOOT AND GLENN KITTELSON RECEIVE "QUALITY PERFORMANCE" AWARDS AT FAA'S FIFTH ANNIVERSARY BANQUET

At the Federal Aviation Agency's Fifth Anniversary Banquet, held in Great Falls on October 23rd, Loren Foot, Chief of RAPCON located at Malmstrom AFB, and Glenn Kittelson, Facility Training Officer for the Air Route Control Center, were named the first recipients of the FAA's "Quality Performance Award." Mr. Charles Kent, Air Traffic Division Representative from Kansas City, Missouri, made the presentation of the well-earned awards.

The program began with Loren Foot giving the invocation. Mr. Ted Cogswell of Cogswell Agency in Great Falls and a member of the Montana Aeronautics Commission, acted as Master of Ceremonies for the dinner, making the introductions and amusing his listeners with several aviation anecdotes. Mr. Cogswell introduced Mr. E. T. Kierski, Air Traffic Supervisor from Minneapolis, Minnesota who gave a history of the FAA's role in aviation and the number presently employed by the FAA nationwide. Mr. Kierski continued to state facts relative to the significance of Positive Air Space. He highly complimented the Great Falls personnel on their work. The second speaker on the program, Mr. Charles Kent, spoke of the sophistication of present day air craft and methods and cited examples of the automation of aviation today. Mr. Kent referred



Charles Kent and Loren Foot

to personnel and equipment on regional level and outlined briefly various approach systems.

The main speaker for the evening, R. F. Kitchingman, Colonel Retired, was then introduced by Mr. Cogswell. "Kitch" was the former C. O. of Malmstrom Air Force Base and well known throughout the Great Falls area having served as Director of the Great Falls Chamber of Commerce. Col. Kitchingman related some of the incidents during World War I and flying in the '20's. He told of his experiences with General Doolittle and many other well known early-day flyers, and conditions under which they flew.

Mr. Charles Penton, Air Traffic

Control Specialist at the Center, entertained with some very astounding card tricks.

The banquet, held in the Rainbow Hotel, was attended by 190 persons, with the greatest number being from the FAA's Great Falls Offices; several from FAA divisional offices in the state; Charles A. Lynch, Director of the Montana Aeronautics Commission; members of the MAC staff; and the out-of-state featured guests.

Letters to the Director

Gentlemen:

The information which you sent us promptly in early summer 1963 was very helpful. We attempted an afternoon trip (knowing well from the experience of earlier years of flying in Montana the turbulence to be expected) from Sheridan to Bozeman. Near Red Lodge we skirted the expected thunderstorm over the higher mountains.

Al Newby, Flite Line, Bozeman, took excellent care of us for the night and advised us to consult with Johnson Flying Service, Missoula, before tackling the Forest service strips. Jack Hughes gave us his best "bush" pilot—Bobby Sanderson—who advised me on the "don'ts" of mountain flying and to avoid too short strips, and then demonstrated for me at Schafer, Spotted Bear and Meadow Creek.

We had a pleasant, too few days at Meadow Creek on the South Fork of the Flathead. The Polson, Montana, airport staff were especially courteous and helpful . . .

Yours very truly,
Signed: W. I. Patterson
Alexandria, Virginia

* * *

Dear Mr. Lynch,

I had been meaning to write you to tell you thank you for the opportunity to take the AOPA 360 degree course. Today I received your letter asking for any comments or boosts on the program.

I was very much pleased with the entire three days I was at Billings. The accommodations at Eastern were fine and the meals were wonderful. The evening classes were handy to get to and besides being very informative were enjoyable. As for the flying part of the course, I don't know how I could have enjoyed any-



L. to R.: Charles Kent, R. F. Kitchingman, and E. T. Kierski.

thing any more! My instructor was Tom Herrod and he seemed to have a knack for making everything so easy.

All in all, I know I am flying a much more accurate course and doing a much better job of VFR flying than I ever did before. It is so much easier to stay right on course and on altitude.

As for talking up the course to anyone else, I certainly will do so. In fact, before leaving Billings I had been talking to several of the other students about this very thing. They all agreed with me, that, in a few months or a year from now, it would probably be much easier to draw enough pilots for another course, as now we know what it means and will sell other pilots on the school.

I surely enjoyed meeting and working with Mr. Eggspuehler and Mr. Nelson, too.

I think this is one of the most worthwhile projects the MAC has undertaken. I hope you'll convey my feelings to the rest of the Commission.

Thank you again.

Sincerely yours,
Donald R. Hellinger
Devon, Montana

* * *

Dear Chuck:

I want to take this opportunity to thank and to congratulate you and the Montana Aeronautics Commission for your parts in promoting and arranging the AOPA 360° Rating Clinic held in Billings last week.

Everyone of the 37 participants I talked to were very enthusiastic about the course and the high quality of the instructors and personnel conducting the clinic, and of course especially Mr. Ralph Nelson and Mr. Jack Eggspuehler. The facilities you were able to arrange with Eastern Montana College were excellent.

Since returning home I have been high in my praise and more than happy to endorse the course to all the pilots I have come in contact with. I am urging everyone of them to avail themselves of the opportunity of taking the course if they ever have the chance. I think as a matter of safety all of us as pilots should be continually striving to update ourselves and keep abreast of the latest techniques. I consider myself fortunate

in having been able to participate in the course.

If you have any more similar type courses, I understand there might be a Nav-Com course coming out in the future, be sure and count me in.

Again, congratulations and thanks for a job well done.

Best regards,
George N. Tillitt
Forsyth, Montana

AIRPORT NOTES



By James H. Monger

Ekalaka — Preliminary engineering has been completed for the construction of a new General Aviation Utility Airport for Ekalaka. It is planned that the advertisement for bids for this job can be started late this year and if weather permits, construction taking place this winter or early next spring. This development will cost less than \$20,000 and will consist of one stabilized turf runway 3,200 feet long by 75 feet in width. There will be an airplane parking apron and a segmented circle. The runway will be marked and the airport property fenced. This will be a joint project between Carter County and the Montana Aeronautics Commission.

Seeley Lake — Advertisements for bids for the construction of a new General Aviation Utility Airport will be made for Seeley Lake late this year. Some construction can take place this winter with the completion of the project being early next summer. Missoula County is sponsoring the project jointly with the Montana Aeronautics Commission. The project will consist of a runway, 3,500 feet long by 75 feet wide with a stabilized turf surface. Any contractor holding a Class "C" Montana Contractors License is eligible to bid on this project.

Dillon—The Administration Building on the Beaverhead County Airport is now 95 per cent complete and

will be ready for occupancy by November 15th. The Administration Building will have space for the FAA Flight Service Station, a flight operator, an airport manager, and a pilot's lounge and waiting room.

Site Investigations — The Airport Division of the Montana Aeronautics Commission is presently conducting site investigations for emergency/recreational type airports at the following locations: "The Pines (Fort Peck Reservoir), Marias Pass (Bear Creek), Richey, and Saco Hot Springs. Upon completion of each Site Investigation, the airport division will know if a project is warranted; if it is economically feasible to build an airport, and if the respective counties will accept the sponsorship.

Roosville — The Montana Aeronautics Commission is coordinating efforts with the British Columbia Aviation Council for a proposed border crossing airport north of Eureka on the Canadian Border near the station of Roosville. To date it has been impossible to acquire the necessary property for this border crossing airstrip on the Montana side, consequently, the BCAC is investigating the availability of land on the Canadian side.

Lincoln — The Lincoln Airport Master Plan has been approved by the FAA and this State-Federal project will be advertised for bids later this year. This VFR Airport is estimated to cost approximately \$63,000 and will be located 1½ miles east of the town of Lincoln, adjacent to the U. S. Forest Service Ranger Station.

SPECIAL REPORT— 1963 AIRMARKING

The Montana Aeronautics Commission has recently completed the 1963 airmarking program. This year, the program consisted of marking both Forest Service lookout towers and rooftop markers throughout the state.

Montana has a total of 342 airmarkers with 88 of these airmarkers located on Forest Service Lookout Tower rooftops, and 254 markers located on rooftops in almost every city, town and hamlet in the state and numerous ranch buildings in remote areas. This summer the Montana Aeronautics Commission Airmarking crews repaired and repainted 133 of the city rooftop markers, and 52 of the Forest Service

Lookout Tower identification markers. It is necessary to repair and repaint each marker every three to four years with the average cost of laying out and painting an airmarker being \$39.62.

It is unfortunate that very few pilots ever offer any comment, either pro or con, regarding airmarkers. The Montana Aeronautics Commission is now trying to evaluate the airmarking program in Montana. The Commissioners would like to have comments from throughout the state, as to the pilot's viewpoint on the value of airmarkers. To date a small number of letters have been received and they have all been favorable toward airmarking; however, the Commissioners have stated that they will approve the continuance of the program only if a considerable amount of favorable comment is received from Montana pilots.

The main reason that the Commissioners are questioning the value of present-day airmarking, is the recent advancements in aviation, including the highly improved and diversified navigational equipment for aircraft; the advanced models of airplanes and the larger percentage of highly qualified pilots. One theory is that there seems to be less low altitude and "seat of the pants" type flying now, because of preflight preparation and communications being far better, along with a wider coverage on current weather conditions. The past theory on airmarking has been that it is not used on the normal everyday flight. Airmarking serves its greatest value in unusual conditions when a pilot has to deviate from his normal planned flight route, because of inclement weather, or when the pilot is temporarily confused. Also, the theory is that airmarking is of more value to the itinerant or out-of-state pilot when he is unfamiliar with a certain area. In other words, airmarking in Iowa may be more valuable to Montana pilots than it is to Iowa pilots, and vice versa. Airmarkers are usually placed on school gymnasium rooftops or other large buildings, preferably located in the center of town, and large, fairly flat rooftops of ranch buildings. The building owners in Montana have all been very cooperative in allowing the Montana Aeronautics Commission to paint their rooftops. The typical airmarker con-

sists of a north arrow, the latitude and longitude, the name of the location and direction and distance to the nearest airport.

You, as a Montana pilot can assist the Montana Aeronautics Commission by writing us your comments, either pro or con, on the continuance of the airmarking program in Montana. **THIS SERVICE IS FOR YOU AND THE OUT-OF-STATE PILOT—DO YOU WANT IT?**



CALENDAR

November 13th—Helena—Montana Aeronautics Commission meeting.

November 19th-20th—Kansas City, Missouri—State Directors Central Region meeting.

December 2-9 — Helena — MAC-MATA Aircraft Mechanics Refresher Seminar.

December 3rd — Miami, Florida — NATA-NPA-NATC National Convention.

New Pilot Training Courses Offered By Jeppeson

Jeppeson & Co., Denver, Colorado, announced the new programmed Pilot Ground Training Courses.

The courses available at this time are the Private Pilot Course and the Instrument Rating Course and both courses have been programmed for simplicity. The presentation makes pilot training easy and strengthens retention of material. The course is designed to provide immediate answers to your correct or incorrect selection of answers to questions. Repetition is stressed to insure retention of important principles. The Commercial Course and others will be available soon.

A copy of the Private Pilot Course is available for inspection and evaluation in the office of the Montana Aeronautics Commission.

FOR LEASE: Fixed base operation, Cut Bank, Montana for immediate occupancy. Contact Caleb Arnestad, Secretary, Cut Bank Airport Commission for details. Box 502. Phone 938-2092, 8 a.m. to 5 p.m.

40 ATTEND ANACONDA BARBECUE

The sun came shining through for the Anaconda Sky-Lodge/Butte Hangar Barbecue on Sunday, October 12 and turned it into a lovely day! Eleven aircraft arrived from various points around the state, including Great Falls, Helena, Butte, Clearwater, Superior, Bozeman, Dillon and Hot Springs. Anaconda's Mayor Callan and his wife joined the group in the lovely picnic area next to the airstrip. Those attending thoroughly enjoyed the delicious steaks served with tossed salad, beans and lots of hot coffee.



Taxi and parking operations were ably handled by Trent Lukens.

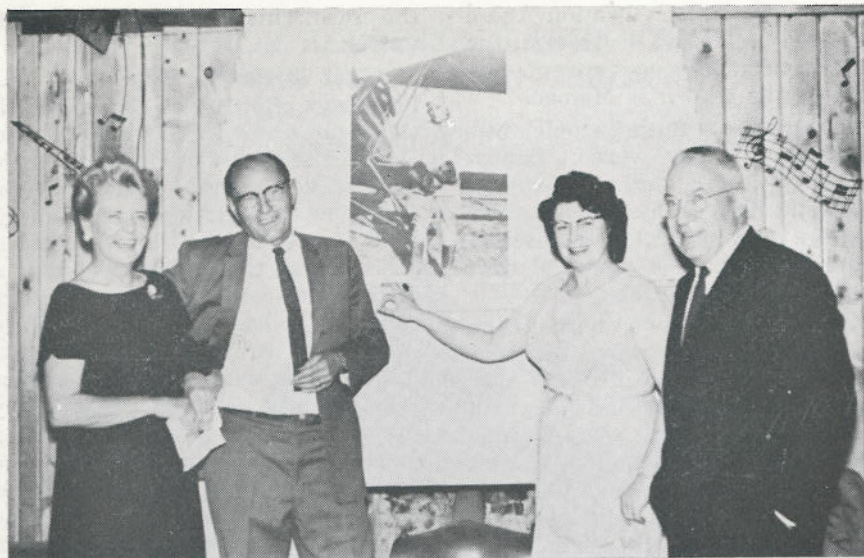
With the sunny skies—good food and fine company—a grand time was had by all!!!

FOR SALE: Piper Clipper PA 16, 115 Hp., red and white "59" paint, VHF radio and Omni, wheel speed fairings, recording tack., 240 Hrs. since major on engine. Radio and tires new, licensed to Aug., '64. Price—\$2500 without radio and Omni.; \$2875 with radio and Omni. Pictures on request. Glenn L. Humphrey, Box 503, Big Sandy, Montana; phone 378-2765.

FOR SALE: 1947 Cessna 140, total time 360 hours. Always hangered, just like new. Price: \$2900. Central Air Service, Box 895, Lewistown, Montana.

FOR SALE: '58 Cessna 175—1000 hrs. since new, 200 hrs. SMOH—Mark II, 27 channel Omnigator, Bird Dog, Dual Controls, New Winter Front, New Compass, New Brakes O.A.T.—Rotating Beacon—VERY CLEAN. Asking \$7,000—No trades. Contact J. P. McGuire, Box 662, Livingston, Montana.

FOR SALE: A-80 Continental with JC 3 Engine—mount and prop (with logs) 173 hours since complete major—also many built up parts and components for a Baby Ace—Make me an offer—see or write Lloyd Heberle, Box 8, Townsend, Montana.



Elizabeth "Bitty" Herrin, Carl, Mrs. Schirmer and Frank Wiley.

APPRECIATION DINNER HELD AS "SEND OFF" FOR CARL SCHIRMER

October 18th was the day and the Nite Owl the location for an "Appreciation Dinner" in honor of Carl Schirmer. Carl is leaving Helena after 36 years on the Helena Airport. Carl, well known in aviation in the Northwest, became active in the Helena area when he became Assistant Director to the Montana Aeronautics Commission in 1947 under Frank Wiley. In January of 1948 he assumed management of Sky Supply, a division of Johnson Flying Service in Missoula.

One hundred persons attended the dinner including representatives from the Montana Pilots Association, Operators, Chemical Companies, The Helena Aeronautics School, the Federal Aviation Agency, and the Montana Aeronautics Commission. Frank Wiley was a very able Master of Ceremonies and Blanche Judge's Centennial Dancers provided the entertainment. A no-host cocktail hour preceeding the dinner drew several of Schirmers' friends that could not attend the dinner and numerous calls and telegrams arrived from around the Northwest from people expressing regret they were unable to arrive for the evening but wishing the Schirmers well.

As Carl leaves Helena to join the parts department of Johnson's Flying Service's Missoula operation, the Montana Aeronautics Commission wishes to join the Schirmers' friends

in wishing them the very best of **Everything** in their new location and say that it has been a pleasure to have had our association with Carl over the years.

CONGRATULATIONS!



CERTIFICATES ISSUED RECENTLY TO MONTANA FLYERS

Sand, Wayne R., Valier—Flight Instructor
Klaue, James D., Vaughn—Flight Instructor
Bunker, Terry H., Great Falls—Private
Ribi, Karin S., Hamilton—Student
Crupper, Gordon, Jr., Hamilton—Student
Delaney, Donald L., Missoula—Student
Sigvardt, Donald F., Great Falls—Student
Spradlin, Jerry M., Great Falls—Student
Sickels, Olive M., Missoula—Student
Sickels, Homer D., Missoula—Student
Glenn, Ernest J., Missoula—Student
Mathews, George A., Malmstrom AFB—Student
Beyers, Robert H., Dillon—Student
Nelson, Jerry A., Dillon—Student
Engelhardt, Frederick C., Butte—Private

Wilson, Jack, Malmstrom AFB—AMEL, Boeing 377 & instr. added to Com.
McLaughlin, Ross W., Great Falls—Private
Patzner, Ronald L., Helena—Private
Beyer, Kenneth D., Helena—Student
Servoss, Frank L., Chinook—Private
Anderson, Hugo V., Great Falls—Student
Bluhm, Donald G., Livingston—Student
Ripley, George E., Lincoln—Student
Hake, William E., Shelby—Student
Brandt, Jared C., Havre—Student
Eisenman, Larry K., Missoula—Senior Parachute Rigger
Gaker, Michael C., Santa Barbara, Calif.—Senior Parachute Rigger
Savage, Roger L., Missoula—Senior Parachute Rigger
Bennett, David W., Butte—Senior Parachute Rigger
Haugo, Donald F., Waubun, Minn.—Senior Parachute Rigger
Johnson, Harold M., Missoula—Senior Parachute Rigger
Normandeau, Ronald E., Polson—Private
Hancock, Chester, Anaconda—Student
Grinde, James A., Shelby—Student
Bolen, Lila J., Eureka—Student
Mattson, Jeanne L., Manhattan—Student
Bluhm, Donald G., Jr., Livingston—Student
Roberts, Olive K., Shelby—Student
Burgess, Donna K., Helena—Student
Jones, David J., Jr., Belgrade—Student
Herler, Charles W., Missoula—Student
Cloninger, David R., Missoula—Student
Engle, Jerry D., Twin Bridges—Student
Adams, Ralph S., Livingston—Flight Instructor
MacDuffie, Joyce S., Helena—Student
Rude, Alfred L., Helena—Student
Carpenter, Kenneth C., Helena—Private
Chur, Lester R., Great Falls—Boeing 377 & Instr. added to Com.
Christian, Steven E., Shelby—Student
Wolf, Dale M., Great Falls—Student
Snyder, Laurence R., Shelby—Student
Halleman, Charles E., Great Falls—Student
Rummel, John A., Helena—Student
Pierson, Edwin G., Shelby—Student

Hart, Hubert E., Jr., Belgrade—
Student
Frank, Richard R., Belgrade—
Student
Willoughby, James S., Belgrade—
Student
Babcock, Wayne K., Great Falls—
Student
White, Wililam T., Malmstrom AFB
—Student
Tice, Gordon P., Great Falls—Student
Hoglund, William S., Great Falls—
Student
Kemmerer, Douglas D., Hillside, Ill.—
Student
Kraus, Patricia, Great Falls—Student
Meador, Lowell A., Great Falls—
Student

"ORDER OF DAEDELIAINS"



By Stanley M. Doyle
Associate Justice
Montana Supreme Court

On April 6, 1917, when the United States declared war against Germany, this country had at that time only 29 trained military pilots and 12 airplanes. Following the Armistice on November 11, 1918, there were a number of groups which had ideas for the organization of World War I pilots in the unity of the war-born comradeship.

On March 26, 1934, a group of World War I pilots who had remained in the service crystalized their ideas and formed what is now known as the "Order of Daedalians".

This name derives itself from Grecian mythology, as in the early

days of western civilization there existed on the Island of Crete in the Mediterranean Sea, a race of seafaring people known as Minoans.

The ruler of these people was called Minos. They were a happy, joyous, peaceful and fun-loving people and they did not fortify their cities but they protected themselves by building the most powerful fleet in the Mediterranean Sea.

Eventually, there was born to the queen of Minos a strange monster, part man and part bull, that possessed the intelligence of a man, and the savagery of a bull. This strange monster was called Minotaur. Minos decided to confine the monster in a labyrinth and engaged a highly skilled artificer named Daedalus to build the structure.

Completing the labyrinth Daedalus collected his fee and prepared to leave but the ruler Minos was determined that the secret of the labyrinth would not leave the island and he imprisoned Daedalus in a tower. As Minos controlled the land and the sea, Daedalus decided to escape by air and built wings for himself and his son Icarus. Daedalus built the wings of feathers and wax and learned to use them and he then built wings for Icarus and taught the boy to fly.

When all was ready for flight, Daedalus said to his son, "Icarus, I charge you not to fly too high lest the heat of the sun melt the wax in your wings and do not fly too low lest the damp of the sea clog your wings but keep near me and you will be safe." With that admonition Daedalus took off followed by his son Icarus.

Icarus in the exuberance of youth ignored the warnings of his father and started soaring higher and higher toward the sun until the heat of the sun melted the wax of his wings and he fell into the sea and was drowned. Thereafter this sea was known as Icarian Sea.

This incident was the proximate cause of a pilot axiom, of 46 years, "There are bold pilots. There are bad pilots, but there are **NO** bold, bad pilots."

There has been a canard extant for the last 20 years disseminated by non-pilots to the effect that instead of the sun melting the wax on Icarus's wings the female flight stewardess sat on his lap and caused

the crash. This however, is absolutely untrue.

Since Daedalus was the first legendary pilot it was considered fitting and proper that the Order of Daedalians should be the name of the organization, composed of those who first flew this Nation's airplanes in time of war. It might be pertinent to observe that these pilots were flying planes within fifteen years from the time that it had been determined by the Wright Brothers at Kitty Hawk in 1903, that man could fly. It was Daedalus who set the example of flying the middle course and living, it was deemed proper that those who were not too bold and did not overtax their frail craft, nor too timid, thereby endangered their craft and lives through excessive caution, should promote flying safety.

The preamble of the Constitution of the Order of Daedalians states the purpose of the organization well. "To perpetuate the spirit of patriotism, the love of country, the high ideals of self-sacrifice which placed service to the nation above special safety or position, and to further cement the ties that comradeship bound together at that critical hour of our Nation's need."

The present active founder-members of the Order of Daedalians in the State of Montana are former Chief Justice Howard A. Johnson, of Butte, Mr. G. R. "Jack" Milburn, a rancher of Grass Range, K. W. Bergan, Coordinator of Indian Affairs, Helena, and the writer. It has been determined that the Honorable Walter R. Flachsenhar, District Judge, of Forsyth, is eligible and his application is being processed. The eligibility requirements for a founder-member are that the applicant must have been a commissioned officer, with a pilot rating of "heavier than air" prior to November 11, 1918.

The Order has approximately 2,500 members as the founder-members may sponsor their male decedents who have attained a majority.

You may out-distance, out-manuever, out-bluff, and out-brag the other pilots, but will you out-live them?

Almost everyone knows the difference between right and wrong, but some just hate to make decisions.

GOVERNOR ADDRESSES LARGE CROWD AT HAVRE DEDICATION CEREMONY



Speaking to a crowd of several hundred people at the Dedication Ceremony of the new administration building and improved runways at the city-county airport at Havre, Governor Babcock highly acclaimed the city of Havre, Hill County and the city-county airport board for their foresightedness in providing such a splendid public use facility. The Governor stated that Montana ranks second only to Alaska in planes per capita and it is installations like the Havre airport which will keep Montana high on the per capita list.

Ken Smith, Denver, Director of Sales for Frontier Airlines, paid his compliments to the airport board on the tremendous development of their facilities over the past year and spoke briefly on aviation in general.

Airport Board Chairman, Harold C. Ebaugh, Master of Ceremonies for the day's events, then introduced the following members of the airport board: Dr. N. A. Franken, Havre, vice-chairman; Peter Hamilton, Mayor of Havre; Ed Bogut and Gordon Sands, both of Havre; Lyle Anderson, Rudyard and Chairman of the Hill County Commissioners, Dean McFadden, Inverness.

Joining the group on the speakers platform were Willard Fraser, Mayor of Billings, and Carl (Bill) Bell from Glasgow and Clarence Anthony, Helena, members of the Montana Aeronautics Commission.

One highlight of the ceremony was

the presentation to Walt Hensley, Hensley Flying Service, in recognition of his 20 years of flying in the area. The trophy, a little old fashioned and the worse for wear but beautifully mounted, was a "Potato Masher," which Walt successfully hooked and landed during a fishing trip to Northern British Columbia.



Walt about to receive "trophy" from Harold Ebaugh.

Prior to the ceremony, Skydivers Cecil Dykstra, Havre, and Bill Ryan and Dick Gallagher both of Glasgow, treated the crowd to a perfectly executed Sky-dive from 6,400 feet, landing directly in front of the crowd.

Following the dedication, benefit rides by local planes and pilots, sponsored by the Havre Hangar of the MPA and the Hill County Search and Rescue Association were given for a nominal fee.

Registration of out-of-town pilots was held early in the morning and

breakfast was prepared and served by local pilots and their wives.

The success of this dedication certainly was fitting recognition deserved by the accomplishment!

CLOUD HOPPING— Northwest Flyer

The other day I was spending a few minutes relaxing in an airport lounge, and happened to overhear a conversation that set me thinking. The conversation was between two gentlemen who were evidently co-owners of an airplane. The gist of the conversation was that they were taking their airplane away from their "home" airport in order to get a "deal" on some repair work. One justification for the move was that "after all, we don't owe him anything." The latter in reference to the local operator.

Why is it, that the grass always seems greener on the other side of the fence? This type of action always reminds me of some of the riding horses that are kept in my neighborhood. It is not at all unusual to see one or more of these broomtails standing belly deep in good pasture, with his chest hard against a sharp barbed wire fence while he munches the rough grass and dandelions along the roadside. Now if you were to kick one of these jugheads out on the road, he would be knocking the fence down trying to get back in the barn, when it came time for that can full of oats.

It is obviously very true in most cases we have no legal obligation as to where we do business. I think that there are many times, however, when we do have a definite moral obligation which in most cases will work out to a financial advantage for us.

Let's face up to a few facts and see where we stand. Assuming that you wish a job done, what do you want for your dollar? Are you looking for integrity, in the business you deal with? If so, who has the least opportunity to "feed you a line", the man that you see every day, or the "Honest John" away from home who may never have to face you again. Who is most apt to best know the existing condition of your equipment, or business, and consequently give you the best job for the money spent?

How about a guarantee of this work? Do you feel that a business

that is miles away will give the same consideration to keeping you a satisfied customer as will the man who must face you every day of the week? While on this subject, what about transportation time. Let's suppose that after taking delivery of your job, you discover an error in workmanship that will take a couple of hours shop labor to rectify. Will you spend two hours of flying time to take it back where you had the job done, or will you foot the bill yourself. If it were done by your local business man there would be no question of what action to take.

Disregarding all sense of obligation, either legal or moral, one of the most important single items to consider is the service which you require, day in and day out. When you spend your dollars, you expect value

in return. If you look closely, you will often find that you are getting far more value than you realize. In most cases this extra service comes from the home base business who desires you as their steady customer. Who gives you a hand when a heavy airplane needs to be pushed into or out of a hangar? Who goes for the air bottle when that hangared or parked airplane shows up with a low tire? Who does so many small favors (when you stop to consider them) over the year's time? Each and every such action takes the time of your local business man or of his employees. His time, is his money, and I believe it deserves recognition and appreciation.

When you get down to facts, it is seldom indeed that you can beat the deal offered right in your own back

yard. The further you get from home the easier it is for the "deal" to sour like Utopia, and the harder it is to prove facts and results.

I think it is high time that we began to consider and appreciate what our local businessman is doing for us. In most cases he gives us his entire support with no question as to extra return. The very least we can do in return is to give him our support by being the kind of customer which he assumes us to be. It can only pay you personal dividends in the long run.

By Don Norris

BASIC VFR MINIMUMS—Those weather conditions under which a chicken can clear a low fence while maintaining satisfactory forward visibility.

MEMBER

NATIONAL ASSOCIATION OF STATE AVIATION OFFICIALS

PURPOSE:—"To foster aviation as an industry, as a mode of transportation for persons and property and as an arm of the national defense; to join with the Federal Government and other groups in **research, development, and advancement of aviation**; to develop uniform aviation laws and regulations; and to otherwise encourage co-operation and mutual aid among the several states."



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